



ESD C 400
Polystyrene (PS)
ESD Protection
Electrically Conductive

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Specific Gravity	1.10	1.10	D 792
Molding Shrinkage			
1/8 in (3.2 mm) section	0.0040 - 0.0060 in/in	0.40 - 0.60 %	D 955
MECHANICAL			
Impact Strength, Izod			
notched 1/8 in (3.2 mm) section	2.0 ft-lbs/in	107 J/m	D 256
unnotched 1/8 in (3.2 mm) section	10.0 ft-lbs/in	534 J/m	D 4812
Tensile Strength	2700 psi	19 MPa	D 638
Tensile Elongation	6.0 - 10.0 %	6.0 - 10.0 %	D 638
Tensile Modulus	0.25 x 10 ⁶ psi	1724 MPa	D 638
Flexural Strength	5500 psi	38 MPa	D 790
Flexural Modulus	0.25 x 10 ⁶ psi	1724 MPa	D 790
ELECTRICAL			
Volume Resistivity	< 1E3 ohm.cm	< 1E3 ohm.cm	D 257
Surface Resistivity	< 1E6 ohm/sq	< 1E6 ohm/sq	D 257
Surface Resistance	< 1E5 ohm	< 1E5 ohm	ESD STM11.11
Static Decay			ESD STM11.11
MIL-PRF-81705D, 5kV to 50 V, 12% RH	< 2.00 s	< 2.00 s	FTMS101C 4046.1

PROPERTY NOTES

Data herein is typical and not to be construed as specifications.

Unless otherwise specified, all data listed is for natural or black colored materials. Pigments can affect properties.

GENERAL PROCESSING FOR INJECTION MOLDING

	English	SI Metric
Injection Pressure	10000 - 15000 psi	69 - 103 MPa
Melt Temperature	410 - 480 °F	210 - 249 °C
Mold Temperature	100 - 150 °F	38 - 66 °C
Drying	2 hrs @ 180 °F	2 hrs @ 82 °C